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PATENT
SP01-325

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Group Art Unit: 1754

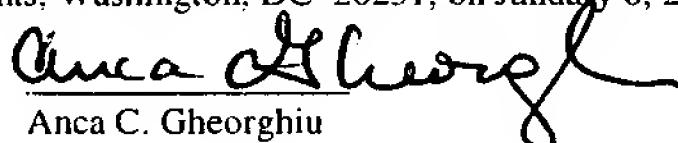
Serial No.: 09/991,401

Examiner: C. A. Fiorilla

Filing Date: November 20, 2001

Title: COMPRESSION-MOLDED SILICON
CARBIDE STRUCTURES

CERTIFICATE OF MAILING (37 CFR 1.8a)
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Anca C. Gheorghiu

BOX NON-FEE AMENDMENT
Assistant Commissioner for Patents
Washington, DC 20231

Sir:

RESPONSE TO THE EXAMINER'S OFFICE ACTION

In reply to the Office Action dated 10/04/2002, designated as Paper No. 6 in the
above-captioned application, please enter the following amendments and remarks as follows:

In the Claims

Please cancel claims 9, 17-36 without prejudice.

Please replace claims 1 and 10 with the following amended claims:

1. (Amended) A process for forming a silicon carbide structure, comprising:
forming a mixture of a silicon precursor powder, a cross-linking thermoset resin and a
silicon-containing filler selected from powder of the group consisting of
silicon carbide, silicon nitride and silicate materials;
compression molding the mixture to form a rigid structure;
carbonizing the rigid structure in an inert atmosphere at a temperature in a range from
about 700 to 1000°C to convert the cross-linking thermoset resin to carbon;
and
heating the rigid structure in an inert atmosphere to a temperature in a range from
about 1400 to 1800°C to allow the carbon to react with silicon in the rigid
structure to form silicon carbide.

A 2

10. (Amended) The process of claim 1, wherein the silicon-containing filler is silicon carbide.
